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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,005

12/23/2005

Antoine Gauriat

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EXAMINER

KRUER, KEVIN R

ART UNIT

PAPER NUMBER

1794

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,005	<b>Applicant(s)</b> GAURIAT ET AL.	
	<b>Examiner</b> KEVIN R. KRUER	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/23/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 12/23/05 has been fully considered. An initialed copy of said IDS is enclosed herein.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 24 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "Use" claims are not eligible subject matter for patentability.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by "greater" in claim 3. Specifically, it is not clear what physical property is being compared (surface area, surface energy, etc).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 4,690,856) in view of Ohmae et al (US 5,047,479) and Saito et al (US 4,429,076).

Ito teaches a laminate comprising two metal sheets adhered together with a polyamide composition (abstract). The composition may comprise 50-99.5wt% of a polyamide, and 0.5-50wt% of a modified polyolefin formed by grafting a polyolefin with an unsaturated compound including carboxylic acids and a derivative thereof such as maleic acid anhydride (col 3, lines 1+). The metal may comprise aluminum (col 5, lines 25+) and may be different (col 5, line 60-herein understood to inherently meet claim 3 because one metal will have a greater surface energy). The polyamide is a nylon 6 (col 2, lines 23+). The olefin may be polyethylene or a non-linear ethylene (col 2, lines 51+). With regards to claim 14, polyamide is considered to be the continuous stage since it comprises the majority of the composition. The laminate may further comprise a resin layer between two adhesive layers (col 5, lines 38+). With regards to claim 19, Ito teaches additives may be included in the adhesive (col 5, lines 6+). Thus, it would have been obvious to the skilled artisan to add a fire retardant to the composition because such additives are commonly used in such adhesives in order to improve fire resistance. With regards to claims 21-23, Ito teaches said method limitations (col 5, lines 60+).

Ito does not teach the adhesive should comprise an epoxy compound. However, Ohmae teaches a thermoplastic resin composition which is obtained from melt kneading 60-97 pbw polyamide, 3-40pbw ethylene copolymer comprising 40-90wt% ethylene and

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5-60wt% unsaturated carboxylate unit, and 0.3-10wt% of maleic anhydride unit, and © 0.1-20pbw of a polyfunctional compound having at least two functional groups having reactivity to a carboxyl group, a carboxylic acid anhydride group or an amino group to effect partial crosslinking (abstract). Said polyfunctional compound may be a glycidyl bisphenol (col 4, liens 40+) and improves the heat resistance, impact resistance, and mechanical properties of the composition. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add 0.1-20wt% glycidyl bisphenol A to the composition taught in Ito. The motivation for doing so would have been to improve the heat resistance, impact resistance, and mechanical properties of the composition. Herein, the epoxy compound is understood to read on the claimed reactive compound.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 4,690,856) in view of Ohmae et al (US 5,047,479), as applied above to claims 1-14 and 17-23, and further in view of Saito et al (US 4,429,076).

Ito in view of Ohmae is relied upon as above, but does not teach the adhesive may comprise a styrene maleic anhydride polymer. However, Saito teaches an adhesive (col 16, line 62) which comprises polyamide, a carboxylic acid modified polyolefin (abstract) and 1-50pbw or styrene maleic anhydride copolymer to improve processability (col 15, lines 37+). Thus, it would have been obvious to the skilled artisan to add 1-50pbw styrene maleic anhydride to the composition taught in Ohmae in order to improve processability.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Krue/

Primary Examiner, Art Unit 1794